

AID P - 4793

Subject : USSR/Engineering

Card 1/1 Pub. 103 - 20/24

Author : Stepanov, L. P.

Title : Micrometric head of a gauge with mechanical fastening  
of the ball.

Periodical : Stan. 1. instr., 3, 40, Mr 1956

Abstract : The author describes an inside caliper gauge provided  
with a device for adjustment and replacement of the ball  
on its edges. This attachment prolongs the useful life  
of the instrument. One drawing.

Institution : None

Submitted : No date

PUGACHEV, I.I.; STEPANOV, L.P.

Hydrostatic bell. Trudy VNIIM no.22:113-116 '54.  
(Manometer) (Hydrostatics--Measurement)

(MIRA 10:12)

STEPANOV, L.P., red.; KUZNETSOVA, M.I., red izd-va; KONDRAT'YEVA, M.A.,  
tekhn. red.

[Instructions 2-54 for checking standard spring manometers and  
vacuummeters] Instruktsiia 2-54 po poverke obraztsovykh pru-  
zhinnykh manometrov i vakuummetrov. Izd. ofitsial'noe. Mo-  
skva, 1957. 14 p. (MIRA 14:5)

1. Russia(1923- U.S.S.R.) Komitet standartov, mer i ismeri-  
tel'nykh priborov.  
(Manometer--Testing) (Vacuum gauges--Testing)

DOLINSKIY, Ye.F.; AGALETSKIY, P.N.; GAYEVSKIY, N.A.; LASSAN, V.L.; OSTRUMOV, B.A.;  
SMOLICH, S.A.; STEPANOV, L.P.; YANOVSKIY, B.M.

Metrological activities in the field of mechanical measurements.  
Trudy.VNIIM no.33:39-59 '58. (MIRA 11:11)

1. Rukovoditel' otдела mekhanicheskikh izmereniy Vsesoyuznogo nauchno-  
issledovatel'skogo instituta metrologii imeni D.I. Mendeleeva (for  
Dolinskiy)

(Mensuration)

STEPANOV, L.P., inzh.

Investigating the performance of the SM-570 eccentric vibrating  
screen. Stroiki dor.mashinostr. 3 no.12:15-19 D '58.  
(MIRA 11:12)

(Vibrators) (Road machinery)

STEPANOV, L.P., inzh.

Grading sand on screening machines. Stroil. i dor. mashinostr.  
4 no. 12:21-24 D '59. (MIRA 13:3)  
(Sand and gravel plants)

MALYAROV, G.A.; STEPANOV, L.P.

Effect of air diluted in water on its viscosity. Trudy VNIIM  
no.37:141-143 '59. (MIRA 13:4)  
(Water) (Viscosity)

STEPANOV, L.P.

New graduation of hydrostatic steelyard-type balance (Westphal  
balance). Trudy VNIIM no.37:149-152 '59.  
(MIRA 13:4)

(Balance)



STEPANOV, L.P.

Hydrostatic weighing of liquids in containers with shaped form.  
Izm.tekh. no.9:12-13 S '60. (MIRA 13:9)  
(Measuring instruments)

S/589/62/000/062/001/011  
E194/E136

AUTHORS: Stepanov, L.P., and Stul'ginskaya, I.A.  
TITLE: Viscosity measurements on petroleum products  
SOURCE: USSR. Komitet standartov, mer i izmeritel'nykh  
priborov. Trudy institutov Komiteta. no. 62(122).  
Moscow, 1962. Issledovaniya v oblasti izmereniy  
vyazkosti, plotnosti i massy. 5-23.  
TEXT: The Soviet standard ГОСТ 33-53 (GOST 33-53) which  
specifies the measurement of kinematic viscosity of petroleum  
products needs revision because the viscometers it considers are  
unsuitable and the experimental conditions recommended do not  
correspond to the established experimental errors. Study of this  
question has shown that the Ubbelohde viscometer is the best  
though it is unsuitable for opaque liquids and not very convenient  
for low temperature determinations because of condensation.  
For opaque liquids it is recommended to use the Cannon-Fenske  
viscometer, slightly modified to ease filling. For measurements  
at 0 °C the Volarovich four-bulb viscometer is recommended. For  
measurements at lower temperatures it is recommended to use either  
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Viscosity measurements on ...

S/589/62/000/062/001/011  
E194/E136

the Rinkevich three-bulb type or the VNIIM viscometer which is the more accurate of the two though somewhat more complicated to manufacture. All the viscometers should be characterized by a series of nominal constants which are multiples of 1 and 3, i.e. 0.003; 0.01; 0.03; 0.1, etc. up to 30 cst/sec. There then follows a detailed analysis of the various sources of error in viscometry, namely, those associated with temperature and temperature measurement; expansion of the glass; time of holding viscometer at the given temperature; inaccurate filling; mounting off vertical; incomplete emptying [Abstractor's note: This factor is considered separately in the paper "Dependence of the precision of measurement on the amount of liquid remaining on the walls of viscometer reservoirs" by L.P. Stepanov, I.A. Stul'ginskaya and N.A. Chesnokov, pp 29-32 of same issue of these transcriptions]; surface tension; kinetic energy; variations in gravity; variations in atmospheric pressure; time errors; instrument constant errors; vibration. It is concluded that certain errors should be pointed out in the standard method. The results of the measurements should be corrected for kinetic energy, gravity variations and thermal

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Viscosity measurements on ...

S/589/62/000/062/001/011  
E194/E136

expansion of the liquid (except in the case of suspended level viscometer).

There are 3 figures and 12 tables.

ASSOCIATION: VNIIM

SUBMITTED: March 25, 1961

Card 3/3

S/589/62/000/062/003/011  
E194/E136

AUTHORS: Stepanov, L.P., Stul'ginskaya, I.A., and Chesnokov, N.A.

TITLE: Dependence of the precision of measurements on the amount of liquid remaining on the walls of viscometer reservoirs

SOURCE: USSR. Komitet standartov, mer i izmeritel'nykh priborov. Trudy institutov Komiteta. no. 62(122). Moscow, 1962. Issledovaniya v oblasti izmereniy vyazkosti, plotnosti i massy. 29-32.

TEXT: The amount of liquid left behind in a viscometer reservoir is liable to be different from that which was left behind during the original calibration. The previous work on this subject, which has given rise to contradictory results, is reviewed. Tests were made with some hundreds of bulbs in five different sizes which, for the purpose of the experiments, were connected to capillaries by rubber tubing. The amount of liquid left adhering to the walls after tests, under various conditions corresponding closely to those of practical viscometry, was

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Dependence of the precision of ... S/589/62/000/062/003/011  
E194/E136

determined by weighing. The relative amount of liquid remaining in spherical reservoirs was found to be independent of their volume, within the range 3.3-15 cm<sup>3</sup> and the viscosity of petroleum products in the range 0.1-13 cst. The error that results from neglecting differences in the amount of liquid adhering to the reservoirs is not more than 0.05% for fluids having a viscosity of up to 1 cS, and is approximately 0.1% for fluids with viscosities in the range 1-13 cst. However, for pressure-viscometers the measurements on a given liquid under different rates of flow may differ by as much as 3%. The experimental data obtained are represented by the following approximate formula:

$$\frac{\Delta V}{V} = A + \frac{B}{\tau} \quad (4)$$

where: V - reservoir volume;  $\tau$  - draining time, seconds; and A and B - constants having the following values for spherical reservoirs in the range 3.3-15 cm<sup>3</sup> and flow times of 100-1000 secs.

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Dependence of the precision of ...

S/589/62/000/062/003/011  
E194/E136

Table 2

	Viscosity of petroleum product, cst		
	0.11	1.07	13.2
A	0.0008	0.0021	0.007
B	0.23	0.77	3.4

There are 1 figure and 2 tables.

ASSOCIATION: VNIIM

SUBMITTED: February 16, 1961

Card 3/3

MALYAROV, G.A. [deceased]; SOROKOMNOVA, T.I.; STEPANOV, L.P.;  
STUL'GINSKAYA, I.A.

Calibration liquids for the control test of viscosimeters.  
Trudy inst. Kom. stand., mer 1 izm. prib. no.68:86-99 '63.  
(MIRA 17:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii  
im. D.I. Mendeleyeva.



34143

S/169/62/000/001/053/083  
D228/D302

3,5140 (1041)

AUTHORS: Leskova, Ye. A., Proshin, V. T. and Stepanov, L. S.

TITLE: Some characteristics of jet streams over the Pacific Ocean's north-western part

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 1, 1962, 49, abstract 1B317 (Tr. Dal'nevost. n.-i. gidrometeorol. in-ta, no. 12, 1961, 45-51)

TEXT: The results are given for observations during the third voyage of the expedition ship "A. I. Voyeykov" from January 9 to February 22, 1960. The material relates to two periods. The first covers soundings from January 19 to February 9 during the ship's movement from north to south; their results are presented in a space-time section from 45°N, 160°E to 10°N, 150°E. The soundings from February 10 to 20 -- made during the ship's movement from south to north and presented in a section from 10°N, 150°E to 42°N, 133°E -- refer to the second period. In the first section a powerful subtropical jet stream with a wind speed of 150 m/sec is found

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S/169/62/000/001/053/083  
D228/D302

Some characteristics of ...

at a height of 12 km in the zone 30 - 33°N. It corresponds to an intense tropospheric front in which the temperature contrast reaches 2.4°/100 km at a height of 6 km and 3.3°/100 km at an altitude of 8 km. Another jet-stream nucleus with a wind velocity of about 70 m/sec at the center is observed at 22 - 24°N at a height of 13 km. This is likewise a subtropical jet stream which has weakened and moved southwards. The preserved but latitudinally small tropospheric-front zone, in which the temperature contrast equals 3.1° per 100 km, also corresponds to it. At a height of 7 - 11 km between the extra- and subtropical jet streams the wind speed declines to 45 m/sec while keeping a westerly direction. The same decrease in the wind velocity, but with a change in the direction, is also observed to the south of the second subtropical jet. Starting from 20 - 24°N in the lower layers and from 19°N, too, at a height of 8 - 15 km south-westerly air streams change into southerlies and south-easterlies. In addition the velocity of the south-easterly flow grows with altitude, and a comparatively narrow zone of south-easterly winds with a speed of about 30 m/sec is found in

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S/169/62/000/001/053/083  
D228/D302

Some characteristics of ...

the 13 - 16 km layer in the area of 16 - 17°N. This is a south-easterly jet stream, formed on the south-western periphery of the Pacific Ocean anticyclone; depending on the measure of the vessel's southwards movement and on its withdrawal towards the southern periphery of the anticyclone, the jet stream gave place to a purely easterly flow with a wind velocity of 10 - 12 m/sec. The lower boundary of the jet stream is situated at an average height of 5 km. In the tropospheric-front region, however, especially on the first section, the descent of the lower boundary of the jet stream to a height of 2 - 3 km was observed. The growth of the wind speed to the heart of the jet is noted from the 5 km level. The unusual intensity of the subtropical jet stream is mentioned. This is explained by the development of a deep cyclone in the observational zone, with pressures of down to 946 mb at its center. Such an intense process over the ocean was also accompanied by the abrupt meridionality of the air streams above the land. This in its turn promoted the formation of an unusually intense high-altitude frontal zone and a powerful subtropical jet stream

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S/169/62/000/001/053/083  
D228/D302

Some characteristics of ...

which has not been considered above. 5 references. [Abstractor's  
note: Complete translation.]

Card 4/4

PATEL, Surendra J.; YASTREBOVA, I.P. [translator]; STEPANOV, L.V., redaktor;  
IOVLAKVA, N.A., tekhnicheskiiy redaktor.

[Agricultural laborers in modern India and Pakistan. Translated from  
the English] Sel'skokhoziaistvennye rabochie v Indii i Pakistane.  
Pereved s angliiskogo I.P.Iastrebovoi. Predislovie G.G.Kotovskogo.  
Moskva, Izd-vo inostrannoi lit-ry, 1955. 197 p. (MLRA 9:5)  
(India--Agricultural laborers) (Pakistan--Agricultural laborers)

STEPANOV, Lev Vasil'yevich

Aziya i Afrika, kontinenty v dvizhenii by L.V. Stepanov i G.I. Mirskiy.  
Moskva, zd-vo Vostochnoy Lit'ry, 1963.

127 p. tables.

At head of title: Akademiya Nauk SSSR. Institut Mirovoy Ekonomiki i  
Mezhdunarodnykh Otnosheniy.

Bibliographical footnotes.

1. Economic assistance - Asia. 2. Asia - Economic Assistance. 3. Economic  
Assistance - Africa. 4. Africa - Economic assistance. 5. Underdeveloped areas.

STEPANOV, M.

Using reed as heat insulating material. Stroil. mat. 4 no.1:10  
Ja '58. (MIRA 11:2)

(Insulation (Heat))  
(Gorkiy--Reed (Botany))

STEPANOV M. (Moskva)

For a speedier solution of current problems. Sots. trud 8  
no. 5:71-73 My '63. (MIRA 16:6)

(Machine-shop practice)



KOROBUT, L.A.; STEPANOV, M.A., inzh., retsenzent; FAL'KO, O.S.,  
inzh., red.; UVAROVA, A.F., tekhn. red.

[Mechanization of agriculture in Great Britain] Mekhaniza-  
tsiia sel'skogo khoziaistva Velikobritanii. Moskva, Mashgiz,  
1961. 185 p. (MIRA 15:10)  
(Great Britain—Farm mechanization)

AKHUNOVA, Turmunoy, Geroy Sotsialisticheskogo Truda; ZALASHANSKIY,  
Stanislav Antonovich; MARTYNOV, Aleksey Nikiforovich;  
STEPANOV, M.A., nauchn. red.; TOCHILINA, L.V., red.

[Technology of cotton growing and harvesting] Tekhnologiya  
vozdelyvaniia i uborki khlopchatnika. Moskva, Vysshiaia  
shkola, 1964. 117 p. (MIRA 17:9)

1. Kolkhoz imeni Kirova Yangiyul'skogo proizvodstvennogo  
upravleniya (for Akhunova)

STEPANOV, M.A.; inzh.

Building one and two-story apartment houses using cementless  
blocks. Nov.tekh. i pered.op. v stroi. 19 no.6:13-14 Je '57.

(MIRA 10:10)

(Apartment houses) (Building blocks)

5.2200,5.4120,21.3000

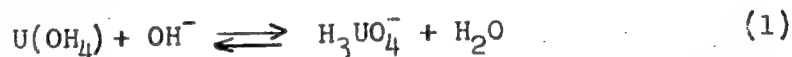
78330  
SOV/89-8-3-15/32

AUTHORS: Galkin, N. P., Stepanov, M. A.

TITLE: Solubility of Uranium Hydroxide (IV) in Caustic Soda.  
Letter to the Editor

PERIODICAL: Atomnaya energiya, 1960, Vol 8, Nr 3, pp 258-261 (USSR)

ABSTRACT: Little is known about the precipitation of uranium (IV) hydroxide in a strongly alkaline medium. Only recently, Gayer and Leider (see ref) showed that the hydroxide of uranium (IV) is amphoteric. The equilibrium constant of the reaction:



is  $1.7 \cdot 10^{-4}$ . Since the solubility of the hydroxide was studied only up to a 0.6 N concentration of the alkali, the authors decided to check the applicability of the above relation for more concentrated alkaline solutions. Hydroxide of uranium (IV) was precipitated

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Solubility of Uranium Hydroxide (IV) in  
Caustic Soda. Letter to the Editor

78330  
SOV/89-8-3-15/32

from the hydrochloric acid solution by means of a water solution of caustic soda. The hydrochloric acid solution of uranium (IV) was prepared following prescriptions found in literature. The hydroxide of uranium (IV) was precipitated by adding 30 ml of a 0.34 N solution of caustic soda to 2 ml of the uranium chloride solution; the tightly closed test tube was kept for 6 hr in an air thermostat at 20° C, with continuous stirring of the contents. Decanting the precipitate three times in a pure argon atmosphere with water, the authors achieved considerable purity. A qualitative reaction on chlorine ion using silver nitrate gave a negative result. The authors note that the statement found in Gmelins (Handbuch der Anorganischen Chemie, Auflage 8, Hr. 55-Uran und Isotope, Berlin, 1936, S. 100), that potassium and sodium cannot be washed away from uranium (IV) hydroxide, seems to be wrong. Spectral analysis showed the absence of sodium (below 0.01%) when the precipitation was achieved using the caustic soda solution.

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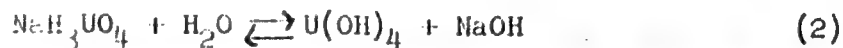
Solubility of Uranium Hydroxide (IV) in  
Caustic Soda. Letter to the Editor

78330

SOV/89-8-3-15/32

This solution was prepared using chemically clean substances. Next, the authors added to the precipitate fixed quantities of alkaline and distilled water. Probes were then mixed in thermostats at  $25 \pm 1^\circ\text{C}$  during 6 days (8 hr per day). The clear fraction was filtered through a paper filter, and the uranium content was then determined. Results are on Fig. A. The authors state that conclusions of Gayer and Leider are valid only up to a 0.5 N concentration. Above this concentration the linear relationship is destroyed, and Eq. (1) is not valid. The decrease in uranium concentration may be explained by salting out by means of sodium ions, if one assumes that a new compound  $\text{NaH}_3\text{UO}_4$  is formed in the precipitate. Analyzing the solid phase, the authors came to the conclusion that the proposed compound can be stable only in strongly alkaline media, while in the presence of water an hydrolysis starts which can be described by the equation:

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Solubility of Uranium Hydroxide (IV) in  
Caustic Soda. Letter to the Editor

78330  
SOV/89-8-3-15/32

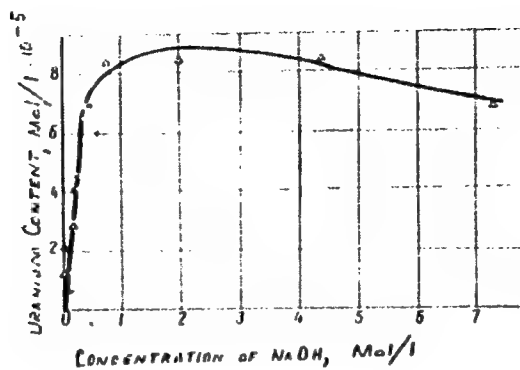


Fig. A. Concentration of uranium (IV) versus alkalinity of medium. (Δ) present data; (x) data by Gayer and Leider.

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Solubility of Uranium Hydroxide (IV) in  
Caustic Soda. Letter to the Editor

78330  
SOV/89-8-3-15/32

There are 1 figure; 2 tables and 9 references, 4 Soviet, 2 French, 1 German, 1 Canadian, 1 U.S. The Canadian and U.S. references are: K. Gayer, H. Leider, Canad. J. Chem. 35, Nr 1, 5 (1957); J. Katz, E. Rabinowitz, Chemistry of Uranium, M., Izd-vo inostr. lit., 1954.

SUBMITTED: November 27, 1959

Card 5/5



81223  
S/089/60/009/004/003/020  
B006/B070

21.3200

AUTHORS: Stepanov, M. A., Galkin, N. P.

TITLE: The Solubility Product of the Hydroxide of Tetravalent Uranium 21

PERIODICAL: Atomnaya energiya, 1960, Vol. 9, No. 4, pp. 282 - 285

TEXT: The present work gives a calculation of the solubility product of uranium (IV) hydroxide. An exact knowledge of the solubility product is necessary for a rational processing of uranium. In the introduction, the authors discuss results of some related papers (Refs. 1-8). Then, they discuss the determination of experimental data necessary for the calculation. The starting material was a solution in hydrochloric acid of uranium (IV) which was kept in a retort in a pure atmosphere of argon. Even after 15 days no oxidation of the uranium was observed. The concentration was measured titrimetrically with potassium bichromate. It was 0.590 M in relation to uranium and 1.02 M in relation to HCl. Solutions of ammonium hydroxide, sodium hydroxide, and potassium hydroxide (0.464, 1.992, 2.184 N, respectively) were used as precipitants. The pH

Card 1/2

STEPANOV, M.A.; GALKIN, N.P.

Solubility product of basic uranium (IV) sulfate. Zhur.neorg.-  
khim. 7 no.5:983-986 My '62. (MIRA 15:7)  
(Uranium sulfate) (Solubility)

KURDYMOV, A.V.; GOLOBORODOV, V.N.; STEPANOV, M.A.

Effect of magnesium and calcium on the corrosion resistance of nickel in an atmosphere of fluoride at 700-860°. Izv. vys. ucheb. zav.; tsvet. met. 6 no.4:138-144 '63. (MIRA 16:8)

1. Moskovskiy institut stali i splavov, kafedra tekhnologii liteynykh protsessov.

(Nickel—Corrosion)

(Metals at high temperatures)

ACCESSION NR: AP4029227

S/0131/64/000/004/0182/0185

AUTHOR: Guzman, I. Ya.; Komissarova, N. M.; Krutikova, I. M.; Stepanov, M. A.

TITLE: Sintering and some properties of  $\text{CaF}_2$  ceramics

SOURCE: Ogneupory\*, no. 4, 1964, 182-185

ABSTRACT: Calcium fluoride has found wide use in various regions of technology as an active flux. Recently, calcium fluoride has begun to be used as a construction and shielding material for conducting a number of high-temperature chemico-metallurgical processes in fluorine-containing media. The authors bring to light processes of sintering as well as some properties of ceramics based on calcium fluoride. Characteristics of the initial materials are given in a table. Characteristics of ceramics from commercial calcium fluoride and the characteristics of ceramics from pure calcium fluoride are presented in tables which depict their properties at different temperature ranges. The composition in properties of grain structure samples of commercial calcium fluoride are given. Testing of calcium fluoride ceramics for corrosion resistance was conducted in a fluorine medium (concentration 92-97%) at a temperature of  $750^\circ\text{C}$  for 16 hours. The evaluation was conducted by visual and weight methods, as well as by stability change during the testing. The rate of corrosion of laboratory and industrial samples was from 5.5 to  $19 \text{ g/m}^2/\text{hr}$ ;

Card 1/2

ACCESSION NR: AP4029227

during testing the stability increased. The obtained results attest to the fact that in a fluorine medium, at 750°C, calcium fluoride ceramics are completely stable and maintain their stability. Therefore, parts can be recommended for service under such conditions as refractory lining material, filters, etc. Orig. art. has: 4 tables.

ASSOCIATION: Khimiko-tekhnologicheskii institut im. D. I. Mendeleeva (Chemico-technological Institute)

SUBMITTED: 00

DATE ACQ: 28Apr64

ENCL: 00

SUB CODE: ML

NO REF SOV: 000

OTHER: 005

Card 2/2

**Instytut Matematyki**

**ANALOGY TO THE METHOD OF ELECTROHYDROLYSIS IN THE SOLUTION OF PROBLEMS OF ENGINEERING**

Ed. of Publishing House: T.K. Romenko; Tech. Ed.: O.O. Matviychuk;  
Editorial Board: P.P. Fil'chakov (Resp. Ed.), V.M. Ostapenko (Resp.  
Secretary), Ya.Y. Blahoveshchens'kyi, I.B. Pohrebovskyi, and  
V.Z. Shumachen'kyi.

**PURPOSE:** This book is intended for scientific workers, engineers, assistants and students.

**FOREWORD:** This book is a collection of articles on the application of the electrohydrodynamic analogy method to the solution of various engineering problems. Among the topics discussed is the modelling of certain electrical problems on resistance paper by the electrohydrodynamic method. Special attention is given to the study of various problems of filtration, in both homogeneous and nonhomogeneous ground, plastic viscoelastic, heat-conducting, and heat-insulating media. The book also contains articles on the engineering problems, modelling of the physical and technical properties of formal adding problems, the accuracy of the electrohydrodynamic analogy method in resistance paper, the use of a universal model of the DINA Integrator is described. All the articles, with the exception of one, were published in English, and are published with the same in Russian in Russian and English.

## VALUE OF COMPANY:

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PA 30T41

USSR/Medicine - Oxygen  
Medicine - Oxygen

Apr 1947

"Use of Oxygen for Treatment of Wounds, and Use of  
Compressed Oxygen for Treating Spontaneous Congenital,"  
M. G. Stepanov, 4 pp

"Gospital'noye Delo" No 4

The first case was treated in this manner at the Pa-  
thological Laboratory of the Black Sea Fleet in 1943.  
Two methods were used in treatment of wounds, admit-  
ting oxygen into the respiratory passages, and piping  
oxygen into the stomach regions. Further experiments  
were made with the oxygen applied directly to the  
wound. This method of treatment of wounds by means

LC

30T41

USSR/Medicine - Oxygen (Cont'd)

Apr 1947

of oxygen gas has proven its worth and is basically  
good. From the Chair of Pharmacology, Stalino Medi-  
cal Institute.

LC

30T41

TRAVEL, H. G.

STEPANOV, N. G.

"Glucose as a Tonicizing Factor for the Cardiovascular System." Sub 22  
Mar 51, Acad Med Sci USSR.

Dissertations presented for science and engineering degrees in Moscow  
during 1951.

SC: Sum. No. 480, 9 May 55.



CHANCY, M. V.; POLCHENKO, A. I.; STEPANOV, M. G.

"Several Methods of Processing Electron (Magnesium) Alloys in the Liquid State,"  
"Trudy Moskovskogo Aviatsionnogo Tekhnologicheskogo Instituta" (Proceedings  
of the Moscow Aviation Inst. of Technol.), Issue No. 4, pp 3-29, 1948.

ACC NR: AP6027800

SOURCE CODE: UR/0126/66/022/001/0157/0158

AUTHOR: Konstantinov, B. P.; Zimkin, I. N.; Stepanov, M. I.  
Shestopalov, L. M. 41  
B

ORG: Physicotechnical Institute im. A. F. Ioffe, AN SSSR (Fiziko-  
tekhnicheskiy institut AN SSSR)

TITLE: Hardening of steel surface by wire explosion

SOURCE: Fizika metallov i metallovedeniye, v. 22, no. 1, 1966, 157-158

TOPIC TAGS: ~~metal~~ *metal* hardening, ~~steel~~ surface hardening, wire, ~~explosive~~ *steel*

ABSTRACT: Copper or steel wire, 0.38—0.4 mm in diameter and 40—50 mm long, placed 10 mm above the face of a cylindrical USA steel specimen was exploded by a current pulse produced by the discharge of a capacitor. As a result of this explosion, the surface microhardness increased from the original 170—200 kg/mm<sup>2</sup> to 950—1200 kg/mm<sup>2</sup>. Although the average thickness of the hardened layer was 20—30  $\mu$ , it was uniform and varied from 0 to 60  $\mu$ . X-ray diffraction patterns showed that the surface layer contained up to 70% austenite, the rest being mostly ferrite with no significant quantity of martensite. It could be that the metal surface was decarbonized, or the ferrite had no time to

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UDC: 621.785.5

ACC NR: AP6027800

change to austenite, or the high rate of cooling preserved  $\delta$  ferrite. [ND]  
The block size in the hardened layer was about 450 Å.

SUB CODE: 11, 13/ SUBM DATE: 23 Sep65/ OTH REF: 001/ ATD PRESS: 5062

Card 2/2111P

OSIPYAN, V.T.; STEPANOV, M.K.; GRABOVSKIY, B.S.; SMIRNOV, K.K.; KAZHDAN, V.B.; MASLIY, L.K.; DUNAYEVA, I.D.

Comparative effectiveness of hexamethylenebenzamide and acetyl-tetrahydroquinoline as protective agents against fleas in humans.  
Med. paraz. i paraz. bol. 32 no.5:551-553 S-0'63 (MIRA 16:12)

1. Iz Voenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova.

STEFANOV, M. L., Cand Tech Sci -- (diss) "Research into methods of accomplishing the work of vertical slip-lifts at several levels simultaneously." Moscow, 1960. 16 pp; (Academy of Sciences USSR, Inst of Mining Affairs); 150 copies; price not given; (KL, 18-60, 153

STEPANOV, M.L., kand. tekhn. nauk

Tabulating cable functions  $M_n(\tau)$ . Mekh. i avtom. v gor. prom.  
no. 3:155-162 '63. (MIRA 16:10)

POKSHISHEVSKIY, V.V., doktor geogr. nauk, prof.; VARLAMOV, V.S.; KHORKEV.  
B.S.; STEPANOV, M.N.; BOTVINNIKOV, V.I.; KOLOBKOV, M.N.;  
VOROB'YEV, V.V., kand. geogr. nauk; KLIMOV, A.I.; STEPANOV,  
A.A.; MYAKUSHKOV, V.A., red.; BELICHENKO, R.K., mladshiy red.;  
MAL'CHEVSKIY, G.N., G.N., red.kart; VILENSKAYA, E.N., tekhn. red.

[Moscow - Vladivostok; railroad guide] Moskva - Vladivostok; pu-  
tevoditel' po zheleznoi doroze. Moskva, Geografiz, 1962. 266 p.  
(MIRA 15:11)

(Railroads--Guides)

STEPANOV, M.N.

Linear regression analysis of the results of fatigue testing  
of aluminum alloys. Zav. lab. 29 no.10:1212-1214 '63.  
(MIRA 16:12)

1. Moskovskiy aviatsionnyy tekhnologicheskii institut.



L 35416-65 EWT(1)/EWT(2)/EWP(w)/EWA(d)/EPR/T/EWP(t)/EWP(b) Ps-4 IJP(c) MJW/  
 ACCESSION NR: AP5007678 EM/JD S/0032/65/031/003/0349/0354

AUTHOR: Stepnov, M. N.

TITLE: Distribution of durability under fatigue tests of light construction alloys

SOURCE: Zavodskaya laboratoriya, v. 31, no. 3, 1965, 349-354

TOPIC TAGS: metal fatigue, metal bending, aluminum alloy, probability, statistics/  
 AV aluminum alloy, V 95 aluminum alloy

ABSTRACT: A probabilistic approach to establishing the durability and reliability of metal alloys is investigated. Two probability functions have found wide use in fatigue testing. These are: 1) the Weibull function  $P(N) = 1 - \exp\left[-\left(\frac{N-N_0}{N_0}\right)^m\right]$ .

established by W. Weibull (Trans. of Royal Institute of Technology, Stockholm, No. 27, 1949, and Saab Aircraft Company, Technical Note, 30, 1954); and 2) the normal

distribution  $P(x) = \frac{1}{\sqrt{2\pi}\sigma} \int_{-\infty}^x -\frac{(x-\bar{x})^2}{\sigma^2} dx$ . In the former distribution, N is the number of cycles until specimen destruction,  $N_0$ ,  $N_v$ , and m are distribution parameters. In

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L 35416-65  
ACCESSION NR: AP5007678

the latter distribution  $x = \log N$ , and  $\bar{x}$ ,  $\sigma^2$  are the mean and variance respectively. Both distributions are used in analyzing fatigue test data from experiments with several specimens of aluminum alloys V95 and AV. Specimens were made in the form of bars 6.75 (V95) and 8 mm (AV) in diameter and tested at a rate of 6000 cycles/minute. The results of the tests are shown in Figs. 1, 2, 3, and 4 on the Enclosure. Based on these observations, the author recommends the use of the normal (Gaussian) distribution. The Weibull distribution was not found to be in close agreement with experimental data. Orig. art. has: 3 equations and 5 figures.

ASSOCIATION: Moskovskiy aviatsonno-tekhnologicheskii institut (Moscow Aviation Technological Institute)

SUBMITTED: 00

ENCL: 03

SUB CODE: MM

NO REF SOV: 006

OTHER: 006

Card 2/5

L 35416-65

ACCESSION NR: AP5007678

ENCLOSURE: 01

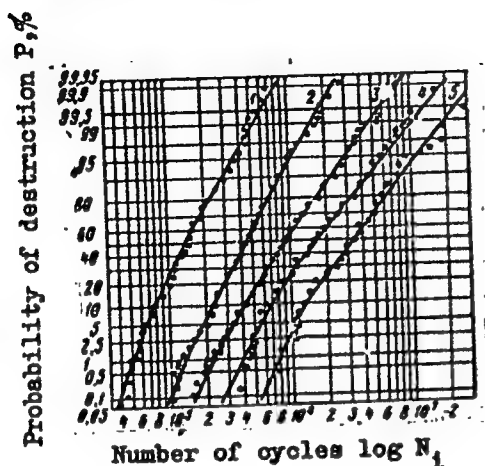


Fig. 1. Curves of the durability distribution in coordinates  $P - \log N$  (normal distribution)

Card 3/5

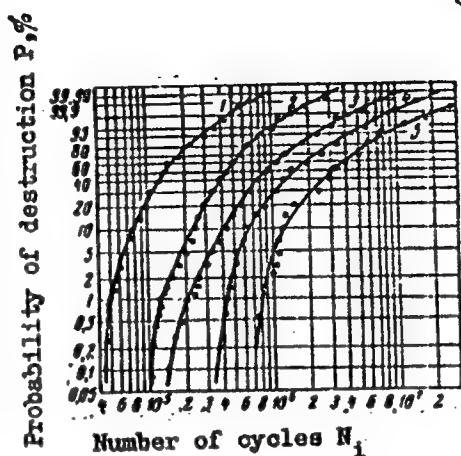


Fig. 2. Curves of the durability distribution in the coordinates  $P - \log N$  (Weibull distribution)

L 35416-65

ACCESSION NR: AP5007678

ENCLOSURE: 02

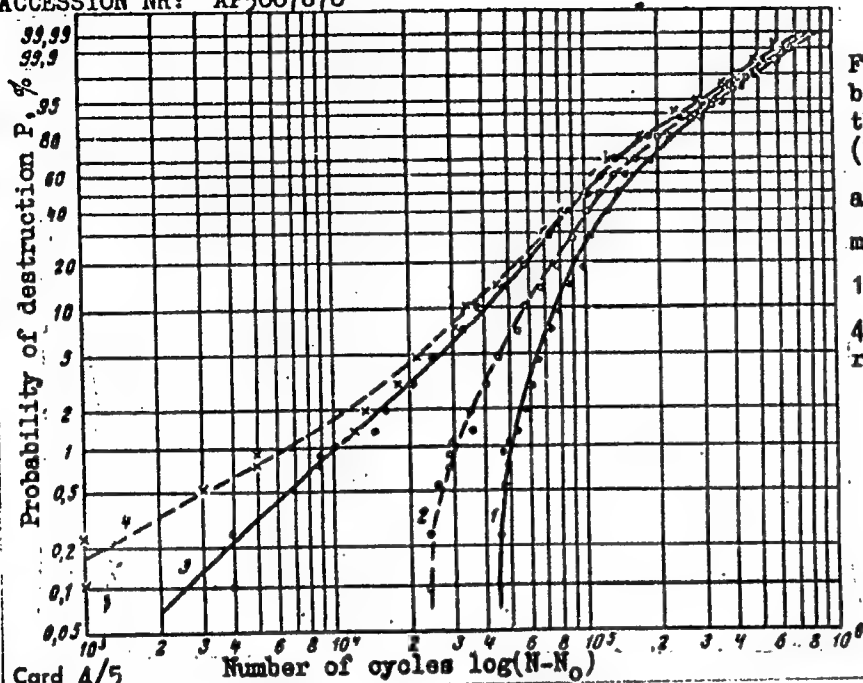
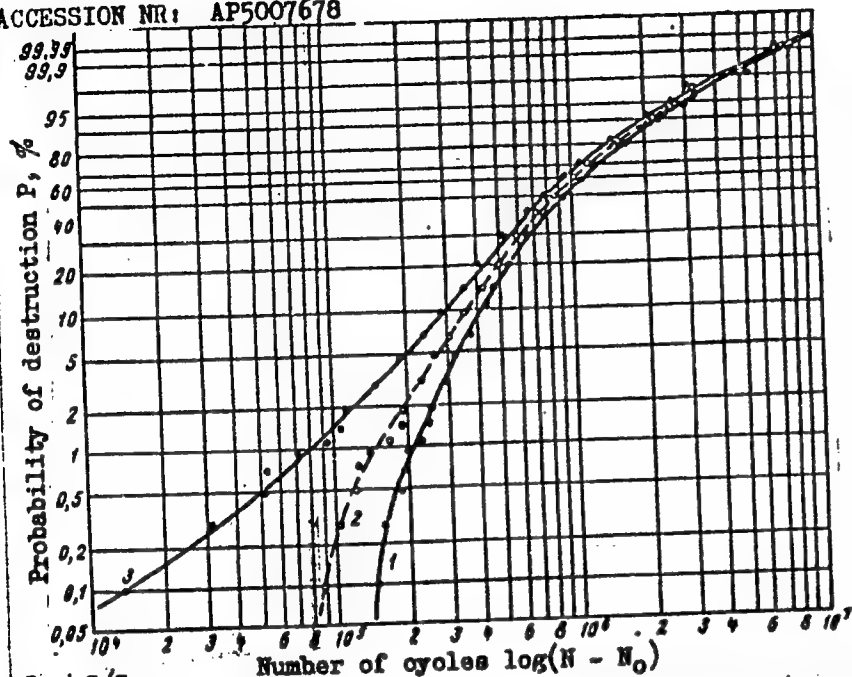


Fig. 3. Curves of durability distribution in the coordinates  $P$ - $\log(N - N_0)$  for specimens of alloy V95,  $\sigma_{\max} = 30 \text{ kgs/mm}^2$ ,  $n = 463$   
 1 -  $N_0 = 0$ ;  $2 \cdot 10^4$ ;  
 $4 \cdot 10^4$ ; and  $4.3 \cdot 10^4$   
 respectively

L 35416-65

ACCESSION NR: AP5007678

ENCLOSURE: 03



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Fig. 4. Curves of the durability distribution in the coordinates  $P - \log(N - N_0)$  for specimens of alloy AV,  $\sigma_{\max} = 18 \text{ kgs/mm}^2$ ,  $n = 500$   
 1 - 3 -  $N_0 = 0; 6.5 \cdot 10^4$ ; and  $1.4 \cdot 10^5$  respectively

L 45379-65 EWT(m)/EWP(w)/EWA(d)/EPR/T/EWP(t)/EWP(z)/EWP(b) Ps-4 IJP(c)  
MJW/JD

ACCESSION NR: AP5006999

S/0129/65/000/003/0005/0008

AUTHOR: Klygin, L. P.; Stepnov, M. N.; Zakharov, V. Z.

TITLE: Fatigue and static crack strength of articles pressed from AV alloy of various degrees of purity

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 3, 1965, 5-8, and bottom half of insert facing p. 24

TOPIC TAGS: anisotropy, metal physical property, metal mechanical property, defect formation, oxide blister

ABSTRACT: The effect of metallurgical defects of the "oxide blister" type on the static crack strength, ductility, and fatigue strength of pressed semifinished products made of AV alloy was investigated. In order to determine the effect of the oxide blisters on the anisotropy of the properties, specimens with a working diameter of 3 mm were cut off in the extrusion direction, and also along the width and height of the strip. Data were also obtained on the effect of oxide blisters using a scale factor, for which specimens with a diameter of 10 mm were tested, and average values of the strength, reduction of area, and elongation were obtained and

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L 45379-65

ACCESSION NR: AP5006999

tabulated. The results show that oxide blisters markedly decrease the fatigue resistance of the material, particularly in transverse specimens. It was found that in all cases, the origin of a fatigue crack was an oxide inclusion. It is concluded that the presence of oxide blisters decreases the plasticity and resistance to cyclic loads, and markedly increases the scatter of the fatigue properties of pressed semifinished products. Orig. art. has: 4 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MM

NO REF SOV: 000

OTHER: 000

Aluminum alloy

27

bjo  
Card 2/2

ex

7

Determination of manganese in accumulator acid. M. N. Stepanov and S. N. Remnev. *J. Chem. Ind. (U. S. S. R.)* 19, No. 8, 223 (1959). - The acid sample is evaporated and the ignited residue dissolved in boiling dil.  $H_2SO_4$ . The filtrate from this is oxidized with  $(NH_4)_2S_2O_8$  in the presence of  $Ag^+$  and the  $MnO_4^-$  ion is detd. colorimetrically by comparison with a standard  $KMnO_4$  soln. H. M. L.

ASTM A 4 METALLURGICAL LITERATURE CLASSIFICATION



CA

**Determination of selenium in sulfur.** (M. N. Remnev and S. N. Remnev. *Zhurnal Khim. Anal.* 1950, 25(1950)).  
 Mix 25 g. of S in a cylinder with 50 ml. of a soln. contg. 100 g.  $MgCl_2 \cdot 6H_2O$  in 50 ml. water, place the cylinder in a  $CaCl_2$  bath, heat to 120-125° and start stirring to emulsify the S. Immediately start adding concd.  $HNO_3$  in small amts. until 20 ml. was added in 10-20 min. At the end of this time the  $MgCl_2$  soln. should have sufficient  $HNO_3$  to prevent the reduction of the Se. Cool the mixt., filter through a quartz filter and wash with hot water. Det. the Se by the method of Marvin and Schumb (*C.* 30, 47°). If Fe is present evap. the filtrate to 10 ml. and neutralize with  $NH_3$ . Filter, add 10 ml.  $HNO_3$  and 3 g. urea, heat to 80°, cool, dil. to 100 ml., add 3 g. KI and starch and titrate with thiosulfate. If the S contains more As than Se the latter is first sepd. as elementary Se and then detd. by titration. H. Z. Korsch

7

Determination of arsenic in sulfur. M. N. Stepanov  
and S. N. Remnev. *Zavodskaya Lab.*, 9, 415-10(1940).  
The As is extd. from the S by emulsifying the molten S in a  
soln. of MgCl<sub>2</sub> and treating with HNO<sub>3</sub> (C. A. 34, 5781),  
after which the As is detd. gravimetrically as Mg<sub>3</sub>As<sub>2</sub>S<sub>4</sub>.  
The presence of Se does not interfere with the detn. of As  
and both elements may be detd. in the same sample.  
B. Z. Kamich

ASB SLA METALLURGICAL LITERATURE CLASSIFICATION

PROCESSES AND PROPERTIES INDEX																									
1ST AND 4TH ORDERS													1ST AND 4TH ORDERS												
<p>Refining sulfur which contains bitumen. M. N. Stcp.  anov. <i>J. Chem. Ind. (U. S. S. R.)</i> 17, No. 1, 43-4 (1940).  S.R. heated for a short time at temps. above 250° in a  sealed container. This destroys most of the bitumen, and  the S is finally purified by distn. H. M. Leicester</p>																									
<p>ASAC SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																									
1ST AND 4TH ORDERS													1ST AND 4TH ORDERS												
<p>1ST AND 4TH ORDERS</p>																									

CH

22

Treating acid sludge. M. N. Stepanov. Russ. Zh. Khim., Feb. 24, 1941. In the conversion of acid sludge by heat-treatment, the gases obtained after the separation of condensing hydrocarbons are passed directly into the operating furnace for the combustion of pyrites or S for the purpose of a final burning of the hydrocarbons and prepn. of a gas with an increased concentration of SO<sub>2</sub>.

ASAC-556 METALLURGICAL LITERATURE CLASSIFICATION

100000	10000	1000	100	10	1	0	9	8	7	6	5	4	3	2	1	0

CA

22

**Reduction of  $H_2SO_4$  from acid sludge from refining cracked products.** M. N. Serpansky and N. N. Remnev. *J. Chem. Ind. (U. S. S. R.)* 19, No. 6, 68 (1941); *Chem. Zvesti.* 1941, 1, 384-5. --If the residue is treated at normal pressure with direct steam, adding hot water, the yield of  $H_2SO_4$  is 60-65%. The content of the acid is 3-3.5% when steam is used and 37-47.9% when hot water is used. With increasing atm. pressure, the amt. of org. material in the acid decreases. Consequently, the acid under normal pressure causes great loss of acid by reduction; with vacuum, the losses are small but at an acid concn. of 80% the acid and the accompanying org. matter form a gel. Upon dilution with water the org. matter can be removed by filtration and the acid can be subsequently concentrated. A. K. Kiselev. **Pumping light hydrocarbons.** Newborn G. Lovell *Paraffin Refiner* 23, 117-22 (1944). --Various types of pumps used in handling  $C_3$  and lighter fractions are discussed. H. H. Kenwick

ASB-11A METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND CIPHERS																										3RD AND 4TH CIPHERS																									
PROCESSES AND PROPERTIES INDEX																																																			
<p>CA</p> <p>Purifying S for gases from Se. M. N. Stepanov, S. N. Remnev and I. I. Berger. <i>J. Chem. Ind. (U. S. S. R.)</i> 1961, No. 20, 4-7(1961).—The S, which contains Se and As, is etimulated by stirring in a soln. of 100 g. <math>MgCl_2 \cdot 6H_2O</math> per 30 cc. <math>H_2O</math> at 125°. The emulsion is treated with 50 kg. <math>HNO_3</math> per ton S. Arsenic is quickly and completely oxidized and 84.6% of the Se is removed by a 1st-order, heterogeneous oxidation. About 2% of the S is also oxidized.</p> <p style="text-align: right;">H. M. Leikvater</p>																																																			
<p>ASB-11A METALLURGICAL LITERATURE CLASSIFICATION</p>																																																			
FROM SYNDICATE																										FROM SCHWAB																									
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AMELIN, A.G.; BALEYEV, A.V.[deceased]; BRUTSKUS, Ye.B.; IEL'MAN, P.N.;  
OSHEROVICH, R.Ye.; STEPANOV, M.N.; CHEPBLEVETSKIY, M.L.; CHERNO-  
BAYEVA, M.M.; MIKHAL'CHUK, B.V., redakter; LEONT'YEVA, K.D., re-  
dakter; SHPAK, Ye.G., tekhnicheskii redakter.

[Methods of analyzing and controlling the production of sulfuric  
acid and superphosphates] Metody analiza i kontrolya proizvodstva  
sernei kisloty i superfosfata. Sost. A.G.Amelin i dr. Pod red.  
B.V.Mikhail'chuka. Moskva, Gos.nauchno-tekhn. izd-vo khim. lit-ry,  
1955. 159 p. (MLRA 9:5)

1.Moscow. Nauchnyy institut po udebreniyam i insektitsidam.  
(Sulphurec acid) (Phosphates)

KUDRYAVTSEV, Aleksandr Andreyevich; STEPANOV, M.N., starshiy nauchnyy sotr.,  
kand. tekhn. nauk, retsenzent; SHIDLOVSKIY, A.A., doktor tekhn.  
nauk, prof., retsenzent; TANANAYEV, I.V., akademik, prof., doktor  
khim. nauk, red.; PLETNEVA, N.B., red.; ALAVERDOV, Ya.G., red. izd-  
va; VORONINA, R.K., tekhn. red.

[Chemistry and technology of selenium and tellurium] Khimiya i  
tekhnologiya selena i tellura. Pod red. I.V.Tananaeva. Moskva,  
Gos. izd-vo "Vysshaya shkola," 1961. 284 p. (MIRA 14:10)

1. Deystvitel'nyy chlen AN SSSR (for Tananayev).  
(Selenium) (Tellurium)



7000000, 7.1.1.1; SEMIAROV, N. S.

Moscow - Building

New appearance of Moscow. Geog. v shkole no. 5, 1952.

9. Monthly List of Russian Accessions, Library of Congress, December 1952, Uncl.

VOROB'YEV, V. V., STEPANOV, M. N.

STEPANOV, M. N.  
Russia - Economic Conditions - Maps

Map of the industrialization of the U.S.S.R., Geog. v shkole no. 1, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

STEPANOV, M.

KIBAL'CHICH, O.; STEPANOV, M.

Discussion of the scientific tasks of the division of economic regionalisation. Vest.Mosk.un.8 no.9:164-169 S '53. (MIRA 6:11)

(Geography, Economic)

STEPANOV, Mikhail Nikolayevich; POKSHISHEVSKIY, V.V., doktor geograficheskikh nauk, otvetstvennyy redaktor; DOBRONRAVOVA, K.O., redaktor; PETUKHOV, V.G., khudozhestvennyy redaktor; KOSHELEVA, S.M., tekhnicheskiy redaktor; GOLITSYN, A.V., redaktor kart.

Molotov. Moskva, Gos. izd-vo geogr. lit-ry, 1954. 71 p. (MLBA 8:2)  
[Microfilm]  
(Molotov--Description)

STEPANOV, M.N.

VOROB'YEV, V.V.; STEPANOV, M.N.

Books about the Altai Territory. Reviewed by V.V.Vorob'ev,  
M.N.Stepanov. Geog.v shkole no.2:76-78 Mr-Apr '54. (MIRA 7:2)  
(Altai Territory--Description and travel)

KIBAL'CHICH, O.A.; STEPANOV, M.N.

Present problems of the division of the U.S.S.R. into economic districts. Izv.Vses.geog.ob-va no.4:354-360 J1-Ag'55.  
(Geography, Economic) (MIRA 8:10)

VOROB'YEV, V.; KIBAL'CHICH, O.; STEPANOV, M.

Discussion of problems of the distribution of productive forces  
and the division of the U.S.S.R. into economic districts in the  
Moscow Branch of the Geographic Society of the U.S.S.R. Izv.AN  
SSSR.Ser.geog. no.2:163-165 Nr-Ap. '56. (MLBA 9:8)  
(Geography, Economic)

STEPANOV, M.N.; VOROB'YEV, V.V.

Local publications devoted to individual towns. Reviewed by  
M.N. Stepanov, V.V. Vorob'ev. Vop.geog. no.38:266-270 '56.  
(MLRA 9:9)

(Cities and towns --Book reviews)



STEPANOV, M.N.

Special features of the districts adjacent to the city of Perm.  
Ůch. zap. Perm. gos. un. 15 no.2:43-46 '60. (MIRA 14:12)  
(Perm region--Agriculture)

STEPANOV, M.N.

"Man improves the planet" by I.I. Adabashev. Reviewed by M.N. Stepanov. Geog. v shkole 23 no. 6:89-90 M-D '60.

(MIRA 13:11)

(Geography)

(Adabashev, I.I.)

STEPANOV, M.N.

"Formation of an urban network in the southern part of Eastern  
Siberia" and "Changes in the urban geography of the southern  
part of Eastern Siberia" by V.V. Vorobev. Reviewed by M.N.  
Stepanov. Izv. Vses. geog. ob-va 92 no. 5: 470-472 8-0 '60.  
(MIRA 13:9)

(Siberia, Eastern--Cities and towns)  
(Vorobev, V.V.)

GOLOVAKO, Viktor Kazimirovich, inzh.-gidrograf; ARKHIFOVA, K.I.,  
kand. geogr. nauk, retsenzent; STEFANOV, M.N., kand.  
geogr. nauk; KOLOENITSYN, V., red.

[Lakes of our territory] Oзера nashego kraia. Sverdlovsk,  
Sverdlovskoe knizhnoe izd-vo, 1963. 134 p.  
(MIRA 17:7)

STEPANOV, M.N.

Main features of the West Ural Economic Region. Uzh. zap. Perm.  
gos. un. 101:5-19 '63 (MIRA 18:2)

STEVENSON, M. P.

3-5-28/38

AUTHORS: Grebennikov, S.F. Candidate of Technical Science and Stepanov, M.P.

TITLE: To Introduce New Methods in Laboratory Practice (Novoye - v laboratornyy praktikum)

PERIODICAL: Vestnik vysshey shkoly, 1957, Nr 5, pp 71 - 73 (USSR)

ABSTRACT: New laboratory work methods of measuring electrically non-electric values were elaborated at the chair of Principles of Electric Engineering of the Moscow Institute of Mechanization and Electrification in Agriculture. The aim of this work is to acquaint the students with the utilization of the wire transducers for the investigation of bending and torsion.

The investigation of bending is described first. A wire transducer having a resistance of 100 ohm is glued to a console beam as shown in Figure 1. The investigation is made by means of an electric bridge circuit mounted on a wooden panel and consisting of 100-ohm resistors. A variable 2-ohm wire resistor is located in series with a fixed resistor on one of the bridge arms. A mirror galvanometer is used for obtaining the zero reading. Current is supplied by a battery. The sensitivity of the bridge circuit may be altered by changing the battery voltage. By changing the resistance, the sensitivity of the galvanometer can be altered.

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3-5-28/38

To Introduce New Methods in Laboratory Practice

On the basis of experience and results computed, the students compose a functional dependence graph of the bending moment, in accordance with the indication of the galvanometer, and then determine the bending moment by the activity of the arbitrary force at the end of the console beam. By using the values of transducer calibration it is possible to determine the value of the bending moment; and, knowing this, to determine the arbitrary force.

The authors then describe the investigation of torsion. For this purpose a hollow shaft (tube), on a section of which a 100-ohm wire transducer is glued in a helical line, is used. The transducer is connected to the afore-mentioned bridge in place of the transducer used for investigating bending. The students' task is to observe the changing indications of the galvanometer by changing the torque through the alteration of forces at the end of the arm, and to register the results in a table.

On the basis of experience and calculated results, the students compose a graph of functional dependence  $\alpha = f(M_{kp})$ . Having obtained the values of the transducer calibration, the students are now able to determine the torques, consider-

Card 2/3

To Introduce New Methods in Laboratory Practice

3-5-28/38

ing the action of arbitrary forces.

The authors believe that the carrying out of the above mentioned task will direct the attention of the future specialists on new methods for the investigation of details in machine units and operating mechanisms. The article contains 2 photographs, 1 circuit diagram and 4 tables.

ASSOCIATION: Moscow Institute of Mechanization and Electrification of Agriculture imeni V.M. Molotov (Moskovskiy institut mekhanizatsii i elektrifikatsii sel'skogo khozyaystva imeni V.M. Molotova)

AVAILABLE: Library of Congress

Card 3/3



572 141000 1000

STEPANOV, M.P.

Case of myelosis with a blood picture characteristic of pernicious anemia. Vrach.delo no.10:1089 O '57. (MIRA 10:11)

1. Terapevticheskoye otdeleniye i klinicheskaya laboratoriya  
bol'nitsy st. Novo-Cherkassk Severo-Kavkazskoy zheleznoy dorogi.  
(MARROW--TUMORS) (ANEMIA)

STASHKOV, M.Ye., kapitan 1-go rango, dot. sent., kand. voyenno-morskikh nauk

Effect of the development of military technology on methods of  
solving battle problems at sea. Mor. zhurn. 1977. No. 12. S. 164.  
(MIRA 18:7)

STEPANOV, N.

Enlarging of panoramic negatives. Sov. foto 22 no.12:31 D '62.  
(MIRA 16:1)

(Photography—Enlarging)

STEPANOV, N.

AID - P-138

Subject : USSR/Aeronautics  
Card : 1/1  
Author : Stepanov, N.  
Title : The Sacred Oath of a Soviet Soldier  
Periodical : Kryn. Rod., 1, 6 - 7, Ja 54  
Abstract : This is patriotic propaganda. The military oath is the principal topic to encourage a soldier after discharge from the armed forces to join the DOSAAF organization. Photo.  
Institution : None  
Submitted : No date

AID P - 2665

Subject : USSR/Aerodynamics

Card 1/1 Pub. 59 - 3/20

Author : Stepanov, N., Col.

Title : ~~\_\_\_\_\_~~  
The banner of the unit

Periodical : Kryl. rod., 7, 2-3, J1 1955

Abstract : A glorification of the banner of the unit as an emblem of patriotism and devotion to duty. Examples of heroism in World War II are given. Photo of Borshchev, P. S.

Institution : None

Submitted : No date

STEPANOV, N., letchik-ispytatel'.

Expert repair and flight test of an Il-14 airplane. Crashd. av.  
13 no.9:22 S '56. (MLRA 9:11)  
(Airplanes--Maintenance and repair)

STEPANOV, N., polkovnik; GOLYSHEV, M., polkovnik.

The Soviet pilot. Kryl. red. 8 no.5:4-5 My '57.  
(Russia--Air pilots)

(MIRA 10:6)

STEPANOV, N., polkovnik

His calling. Kryl.rod. 11 no.7:19-20 Л '60.  
(Golubev, Viktor Maksimovich)

(MIRA 13:7)



STEPANOV, N.

Cut down on idle time during the maintenance of aircraft. Grazhd.  
av. 17 no.5:26-27 My '60. (MIRA 13:7)

1. Nachal'nik ~~tsokha~~ lineyno-ekspluatatsionnykh i remontnykh  
masterskikh, Vnukovo.  
(Moscow--Airplanes--Maintenance and repair)

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50-58-4-15/26

AUTHOR: Stepanov, N. D.

TITLE: On the Agro-Meteorological Service for Kolkhoz, Sovkhoz and MTS (~~Machine~~ and tractor stations - ~~mashinno-traktornyye~~ stantsii) Ob agrometeorologicheskoy obsluzhivaniy kolkhozov, sovkhozov i MTS)

PERIODICAL: Meteorologiya i Gidrologiya, 1958, Nr 4, pp 40 - 40 (USSR)

ABSTRACT: This kind of direct service for agricultural industries is no less important than the one of the district organizations. In practice, however, above all the latter are supplied. To the local organizations the hydro-meteorological bureaus (Gidro-meteoburo) send only weather forecasts and warnings. The hydro-meteorological stations (Gidrometeorostantsiya), which have to care for the local agricultural organizations, mainly just pass on the same data to the factories. The factories, however, need respective informations in the larger sense of the word to a not less degree. But they ought to be arranged differently, more concretely, and be adapted to the factory conditions. Therefore the informations ought to come from a hydrometeorological station, which is to have the sup-

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On the Agro-Meteorological Service for Kolkhoz, Sovkhoz and MTS (Machine and tractor stations - mashinno-traktornyye stantsii)

port of the weather- and of the hydrometeorological office. For this purpose UGMS (Hydrometeorological Service Administration) in Ural'sk wrote an information letter for the stations, which is to serve the above mentioned purpose. In this the estimation methods of the agro-meteorological conditions and methods for drawing up informations are explained in an intelligible form. These methods were worked out by the Central Weather Forecast Institute (TsIP). They must be present in handy form. Therefore UGMS recommended to the stations a drawing up of agro-climatical parameters and specimens to tables.

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1. Agriculture - USSR
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